**FIG. 1**

Genomic copy Y sequence

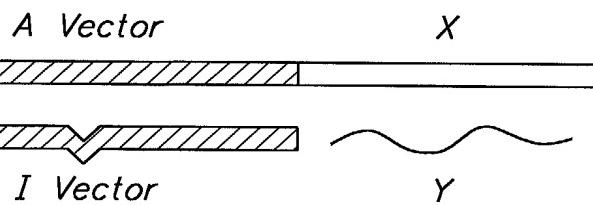
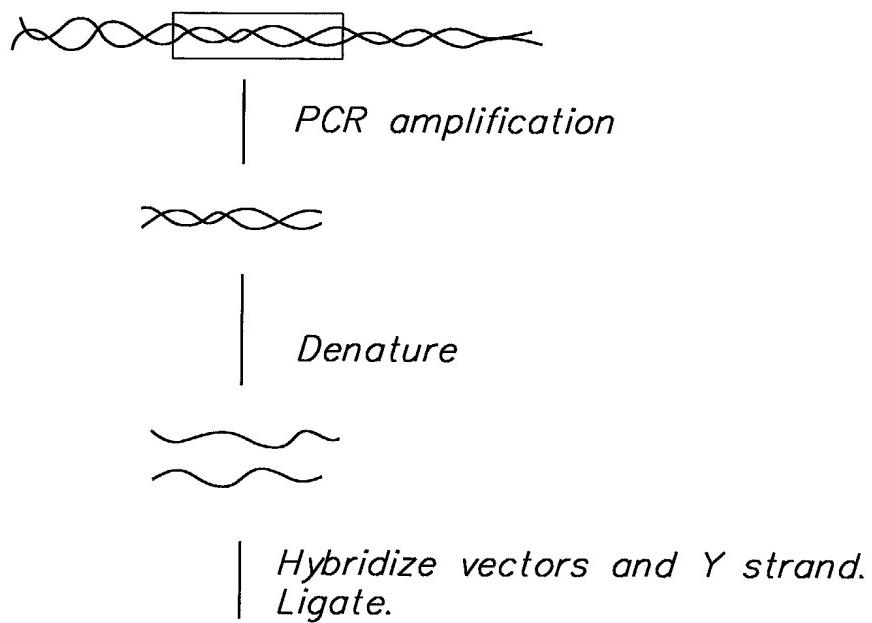


FIG. 2

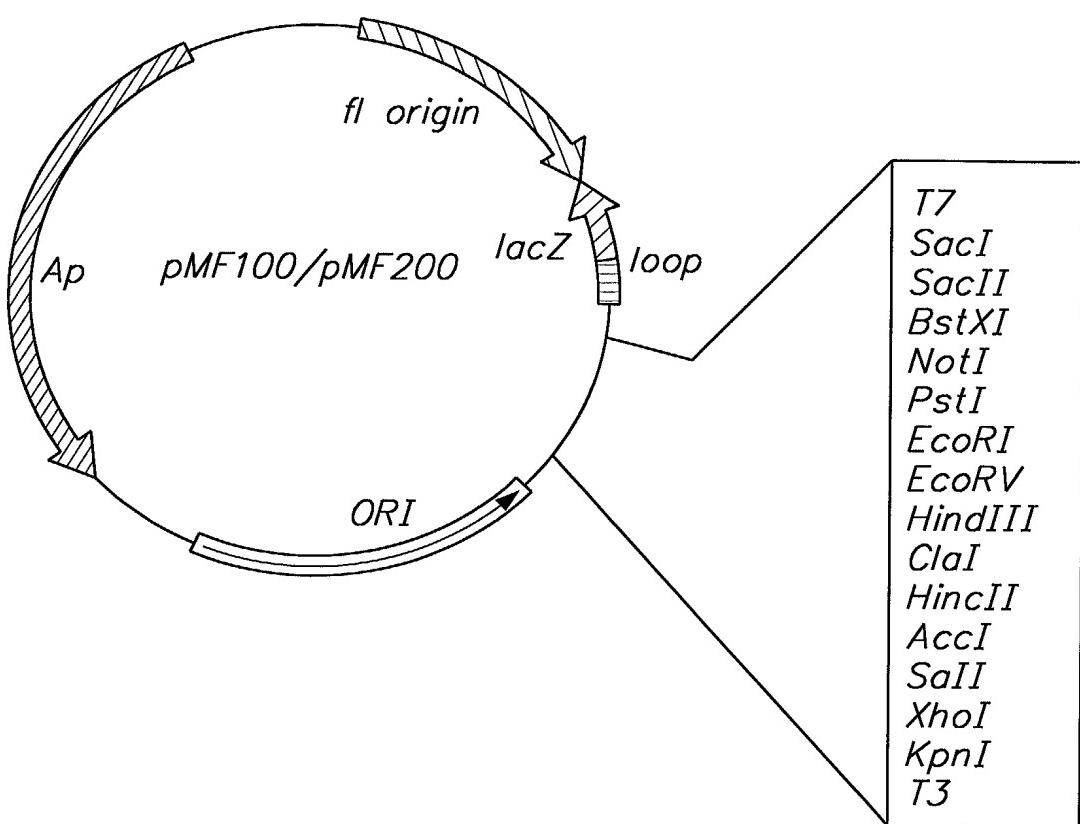
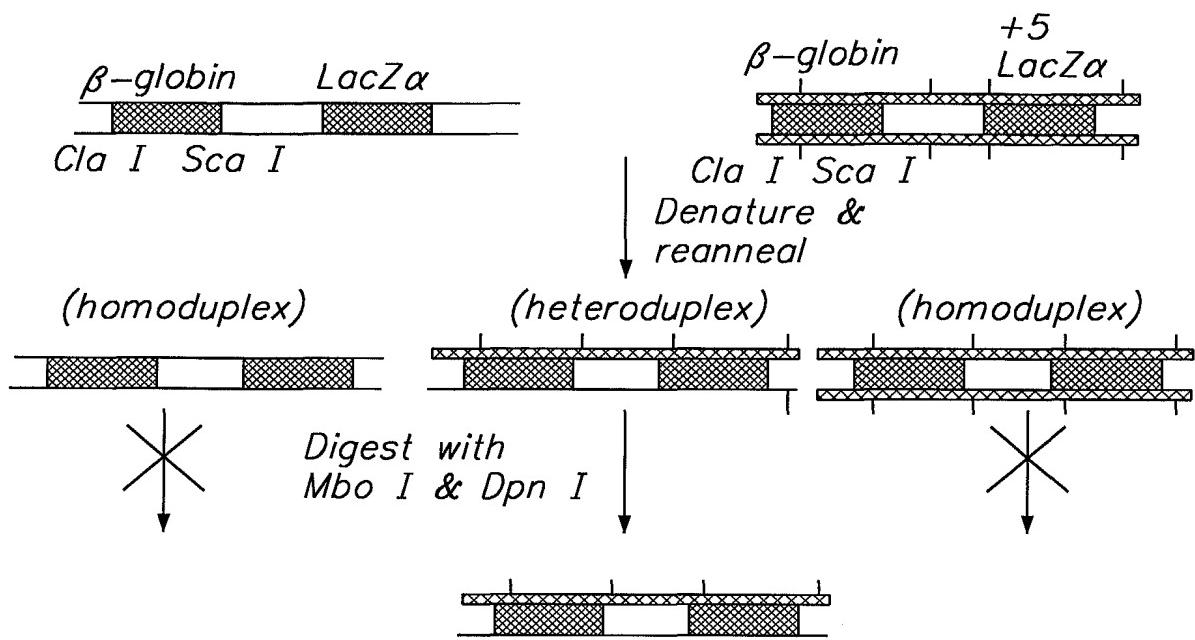


FIG. 3



I: methylated GATC

— : plasmid with intact LacZ α ===== : plasmid with a 5 bp insertion in LacZ α **FIG. 4**

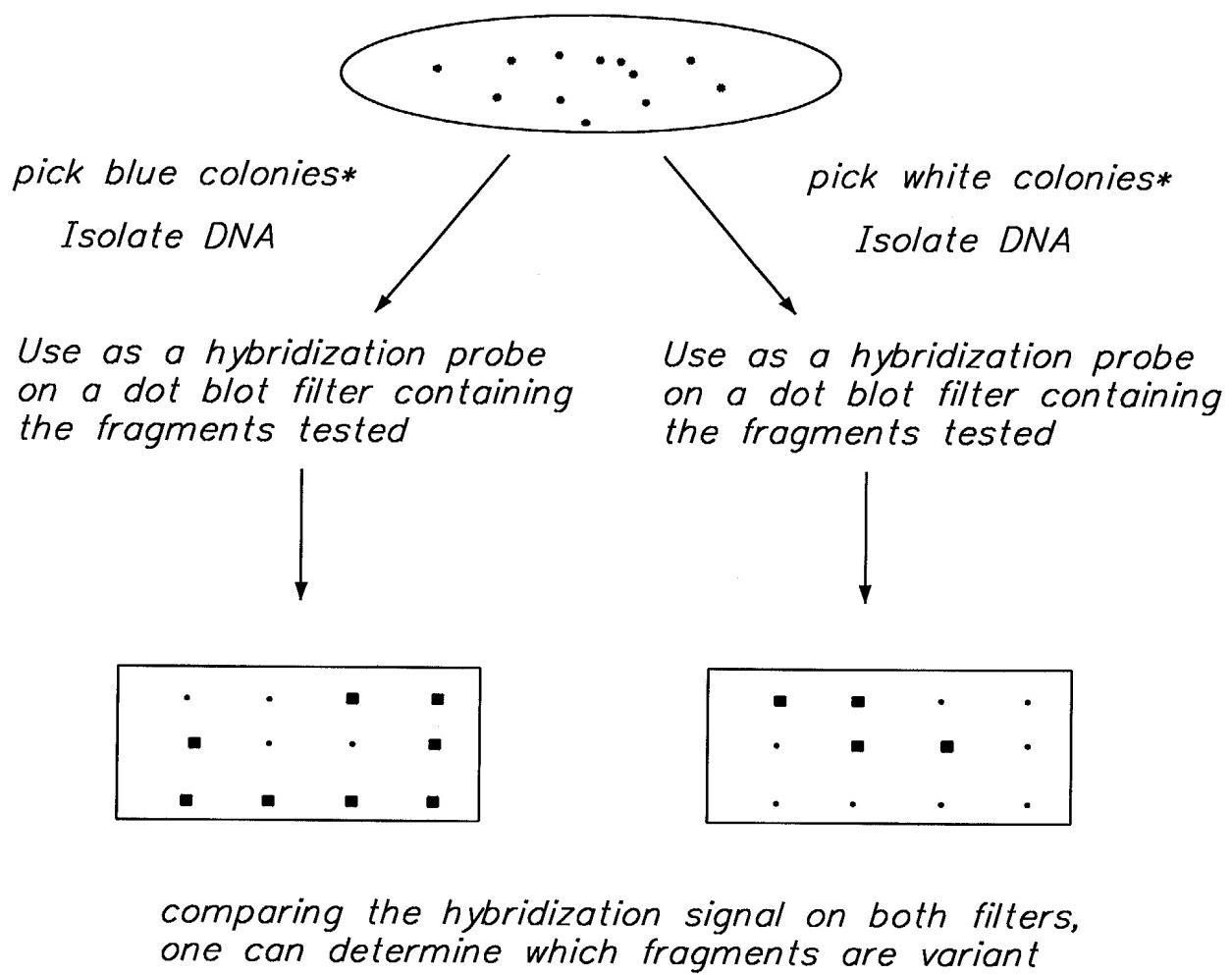
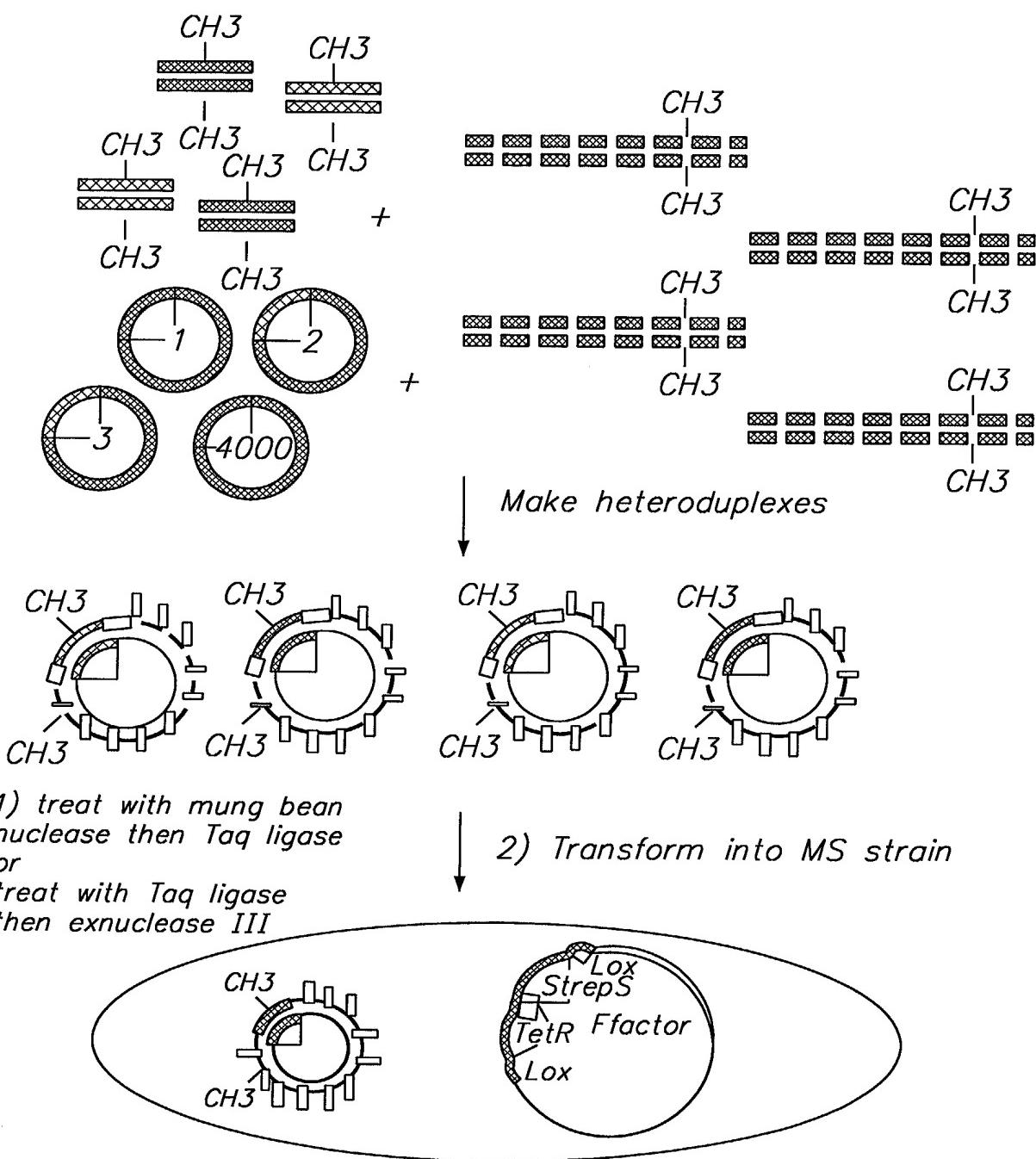
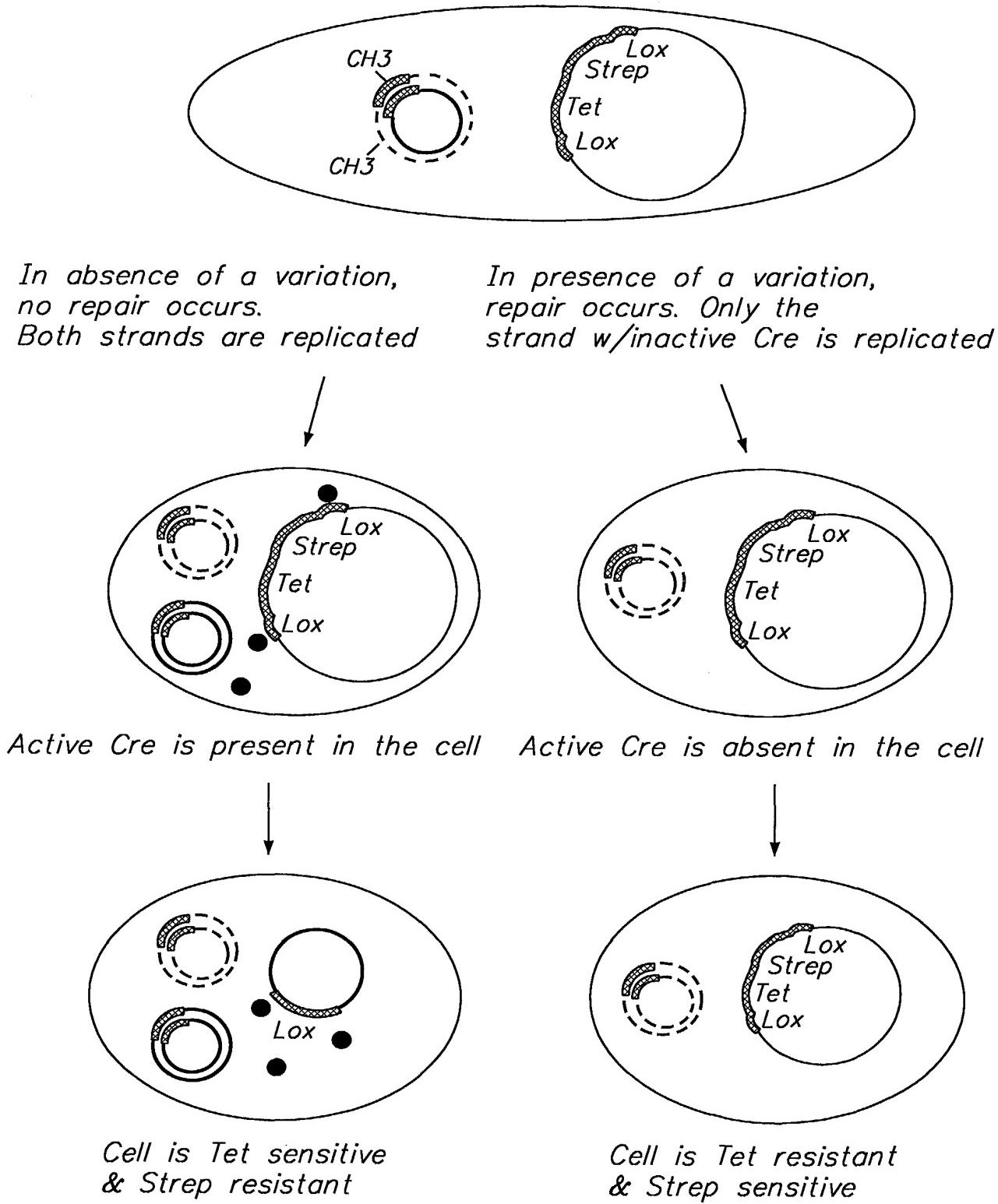


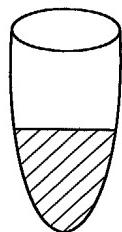
FIG. 5

**FIG. 6A**

**FIG. 6B**

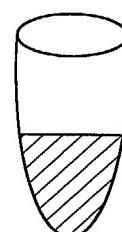
Cells are grown in two tubes supplemented either with

Tetracycline



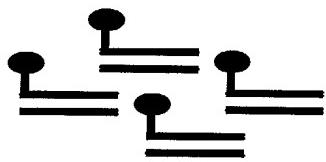
or

Streptomycin

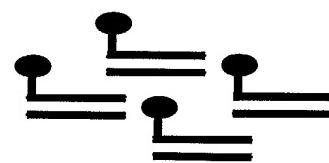


Next day DNA is preped from the pool of the cells
grown in each tube

DNA from the Tet pool is
labeled with green fluorescence



DNA from the Strep pool is
labeled with red fluorescence



DNA from both pools are mixed and hybridized
to a DNA microarray.
Each spot corresponds to a different gene fragment
that is being tested

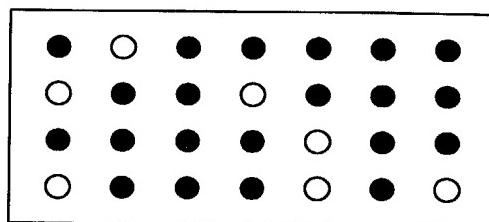


FIG. 6C

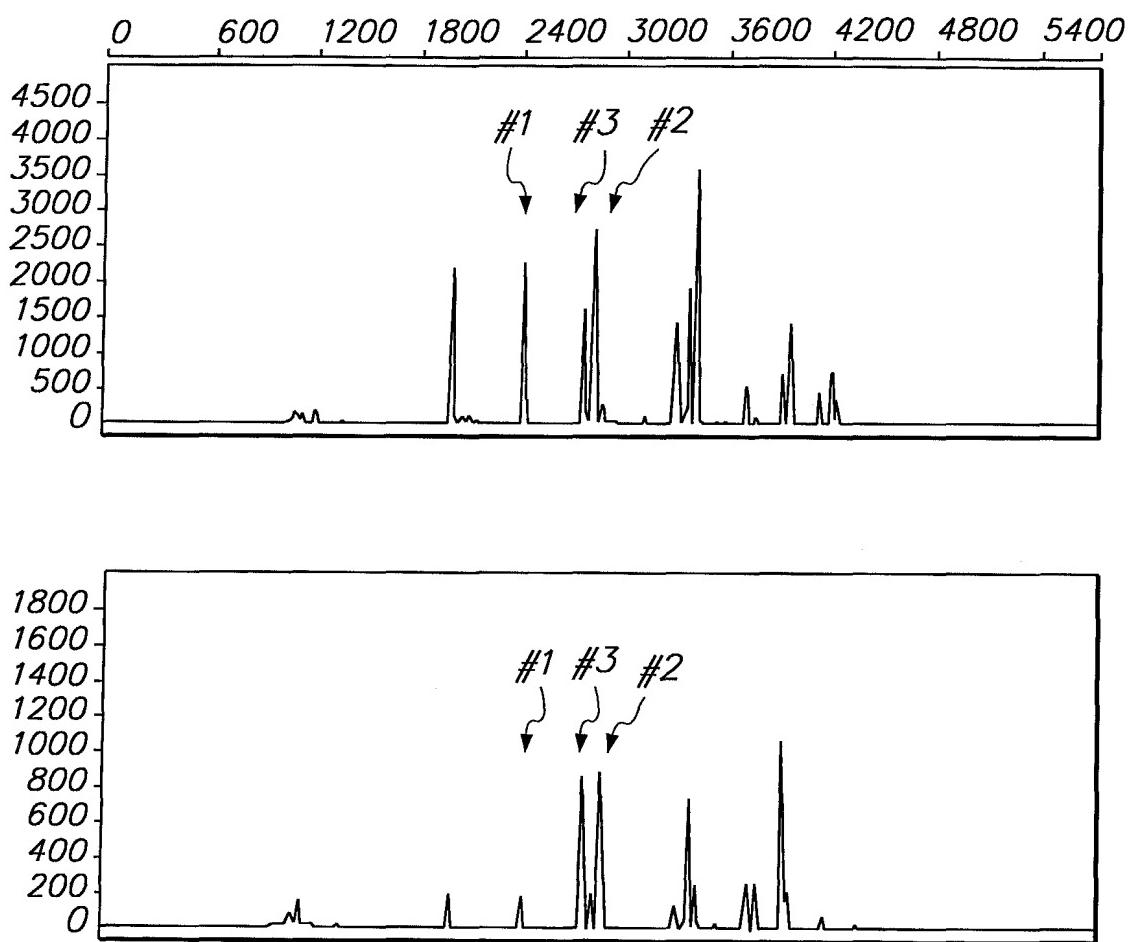


FIG. 7